EL2003D Die

100 MHz Video Line Driver

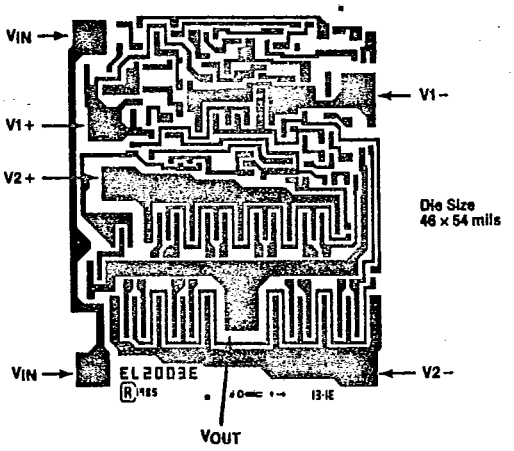
T-79-25

Absolute Maximum Ratings (T_A = 25°C)

V_S	Supply Voltage (V+ – V–)	±18V or ±36V
V_{IN}	Input Voltage (Note 1)	±15V or V_S
I_{IN}	Input Current (Note 1)	±50 mA
	Output Short Circuit Duration (Note 3)	Continuous
T_J	Maximum Junction Temperature	175°C

Important Note:
For AC electrical characteristics, refer to the typical electrical table and performance curves in the package data sheet. These characteristics are guaranteed but not tested in die form. Unless otherwise noted, all tests are pulsed tests, therefore $T_J = T_C = T_A$.

Test Level	Test Procedure
I	100% production tested in wafer form. See remarks under Electrical Testing in the General Die section.



DC Electrical Characteristics V_S = ±15V, R_S = 50Ω, T_A = 25°C

Parameter	Description	Test Conditions		Limits			Test Level	Units
		V_{IN}	Load	Min	Typ	Max		
V_{OS}	Output Offset Voltage	0	∞	–40	5	40	I	mV
I_{IN}	Input Current	0	∞	–25		25	I	µA
R_{IN}	Input Resistance	±12V	100Ω	1	2		I	MΩ
A_{V1}	Voltage Gain	±12V	1 kΩ	0.98	0.99		I	V/V
A_{V2}	Voltage Gain	±6V	50Ω	0.83	0.90		I	V/V
A_{V3}	Voltage Gain, V_S = ±15V	±3V	50Ω	0.82	0.89		I	V/V
V_{O1}	Output Voltage Swing	±14V	1 kΩ	±13	±13.5		I	V
V_{O2}	Output Voltage Swing	±12V	100Ω	±10.5	±11.3		I	V
R_{OUT}	Output Resistance	±2V	50Ω		7	10	I	Ω
I_{OUT}	Output Current	±12V	(Note 2)	±105	±230		I	mA
I_S	Supply Current	0	∞		10	15	I	mA
PSRR	Supply Rejection (Note 3)	0	∞	60	80		I	dB

Note 1: If the input exceeds the ratings shown (or the supplies) or if the input to output voltage exceeds ±7.5V then the input current must be limited to ±50 mA. See the application hints for more information.

Note 2: Force the input to +12V and the output to +10V and measure the output current. Repeat with –12V in and –10V on the output.

Note 3: V_S = ±4.5V to ±18V.